National Institutes of Health

Press Release for the FY 2003 President's Budget

February 4, 2002

NIH Budget at a Glance		
		% Change
FY 2001 Actual Current Law	*$20,469 m*	
FY 2001 Actual Proposed Law	$20,549 m	
FY 2002 Estimate Current Law	*$23,536 m*	*15.0%*
FY 2002 Estimate Proposed Law	$23,623 m	15.0%
FY 2003 President's Budget Current Law	*$27,244 m*	*15.7%*
FY 2003 President's Budget Proposed Law	$27,335 m	15.7%
Number of Competing RPGs	9,854	
Total Number of RPGs w/o SBIR/STTR	35,920	

The mission of the National Institutes of Health (NIH) is to expand fundamental knowledge about the nature and behavior of living systems and to improve and develop new strategies for the diagnosis, treatment, and prevention of disease and communicates the results of research with the goal of improving health. The 27 Institutes and Centers, which comprise the NIH, support research and researchers working in universities, medical centers, hospitals, and research institutions in every State and territory in the Nation and in many countries around the world. The NIH also conducts research in its own laboratories. In order to help ensure that there is a continuing cadre of outstanding scientists for the future and that there are facilities in which to conduct this research, the Agency supports research training, career development, and some buildings and facilities programs.

The FY 2003 budget request for the NIH, based on current law, is $27,244 million, including VA/HUD appropriated Superfund-related research activities. The Fiscal Year 2003 President's budget requests $27,335 million for NIH, an increase of $3,902 million, or 16.7% over the FY 2002 estimate, and an increase of $3,712 million or 15.7 percent when including the FY 2002 Emergency Response Fund. This budget request for FY 2003 includes $91.1 million for accrued retirement and health benefits associated with the proposed Managerial Flexibility Act of 2001.

The budget completes the President's commitment to double the FY 1998 appropriation level in five years. Of this amount, $76 million is requested from the Veteran's Administration/Housing and Urban Development Appropriations Subcommittee for Superfund research activities. The NIH President's budget request to the Labor/Health and Human Services/Education Appropriations Committee is $27,259 million.

Support for AIDS research will increase by $255 million, or 10 percent over the FY 2002 estimate, for a total of $2,770 million. This amount includes accrued costs for the AIDS research program.

The FY 2003 President's budget request will allow NIH to continue its FY 2002 support of $100 million for the Global Fund to Fight HIV/AIDS, Malaria, and Tuberculosis, to further the NIH's efforts to prevent and alleviate these diseases.

NIH's future efforts are rooted in knowledge gained over decades of publicly supported medical research. FY 2003 funds will be used to address converging arenas of scientific opportunity and public health, such as bioterrorism, cancer, diabetes, Parkinson's disease, Alzheimer's disease and the health of minority populations.

FY 2003 Research Initiatives

Bioterrorism. The events of September 11, 2001, and the subsequent intentional release of anthrax spores are having a substantial effect on the NIH and the research it supports. It is clear that the NIH has an important role in both conducting research on the agents of bioterrorism and in ensuring that there is up-to-date and accurate information on therapeutic options and other interventions to guide the responses to terrorist attacks.

In consultation with the Federal Office of Homeland Security and the HHS Office of Public Health Preparedness, the NIH has developed a FY 2003 budget request that includes a total of $1,748 million for bioterrorism-related research and infrastructure, an increase of $1,473 million over FY 2002. Of this amount NIH estimates that it will fund $977 million for bioterrorism research activities, to continue existing bioterrorism-related programs as well as initiate new ones.

The initial focus of this research effort is on the agents identified in the Centers for Disease Control and Prevention threat list. The goals of this markedly expanded research effort are to develop the countermeasures that will be needed to respond to and control the intentional or unintentional release of agents of bioterrorism. This program is designed to maximize the efforts of industry, academia, and federal researchers to accelerate the development of new and safer vaccines, therapeutic agents, and improved diagnostic tests.

The plan consists of four, broad interconnected efforts:

- Expand basic research on the physiology and genetics of potential bioterrorism agents, on immune system function and on response to each potential agent, and the pathogenesis of each disease.

- Accelerate discovery and development of the next generation of vaccines, therapeutic agents, and diagnostic tests using knowledge from basic research.

- Expand clinical research on newly discovered and developed products to test for safety and effectiveness.

- Expand research infrastructure to enable biomedical research efforts on pathogenic microbes, including potential bioterrorism agents.

Cancer. With focused efforts and increased resources, NIH will build on past successes and technological breakthroughs to stimulate progress in addressing some of our most difficult questions about cancer. The FY 2003 President's budget request will allow the NIH in total to support an estimated $5.5 billion in cancer research. Our increased investments in all areas of cancer research will accelerate the pace of cancer research and improve our ability to find better ways to care for those whose lives are touched by cancer.

Support will be provided for large-scale studies on critical cancer control, prevention, and screening questions. For example, the NIH will conduct the largest-ever prevention study to determine if vitamin E and selenium can protect against prostate cancer. For this trial, NIH will be working in partnership with the Southwest Oncology Group, that records participants from over 400sites in the United States, Puerto Rico and Canada, one of several cancer cooperative groups sponsored by the agency.

The NIH and another cooperative group, the American College of Radiology Imaging Network, will launch the first large, multicenter study to compare digital mammography to standard mammography for the detection of breast cancer. Digital mammography technology provides higher resolution images than standard mammography, and investigators want to determine if it can detect breast cancer more accurately. A total of 19 institutions in the United States and Canada will take part in the study.

Furthermore, investigators who are part of an NIH Cohort Consortium will be working to uncover potential interactions of genetics and environmental exposure by combining data from prospective cohort studies involving 7,490 cases of breast cancer and 7,130 cases of prostate cancer. Interactions between established risk factors and a set of genetic variants associated with these cancers will be studied. The collaborative effort will serve as a model for future efforts that can take full advantage of investments in large population studies and increase our understanding of what is needed to better control, prevent, and treat cancer.

As a result of budget increases, the Institutes and Centers (ICs) at the NIH have many new research initiatives underway, all of which will be continued in FY 2003 and beyond. The following three areas also represent particularly outstanding scientific opportunities that have the promise to yield enormous benefits in the future in the form of new knowledge and treatment and prevention strategies. The prospects for improvements in health and quality of life from medical research provide hope for a healthy future.

Diabetes. Diabetes is a chronic disease and can result in serious complications and premature death if not well-managed by patient and caregiver. Recent data show that over the past decade and even over the past year, there has been a dramatic increase in obesity and type 2 diabetes in

the U.S. across all age groups, including adolescents, and in all racial/ethnic groups, with Hispanic-American, African-American, and Native American groups particularly severely affected.

A recently completed Diabetes Prevention Program trial provided proof of principle that modest lifestyle changes can prevent type 2 diabetes in high- risk people with impaired glucose tolerance. The impetus now is to develop more effective methods to identify individuals with impaired glucose tolerance and to provide intervention. Cost effective approaches directed at providers, high-risk individuals, and communities to support achieving these lifestyle changes must be developed and validated. Research is needed to: 1) understand health care providers' knowledge, attitudes, and skills related to diabetes prevention and how providers can be encouraged and enabled to provide effective lifestyle intervention; 2) understand an individual's knowledge about personal risk and the importance of prevention and how they can be motivated and empowered to achieve lifestyle change; and 3) understand and alter social, environmental, and community factors that influence lifestyle and choices. A trans-NIH Request for Applications focused on research addressing these issues is under development for FY 2003.

With respect to type 1 diabetes, NIH scientists are continuing research on islet transplantation in humans, and preliminary studies appear promising. Other research will include, for example, an oral insulin study of the Diabetes Prevention Trial for Type 1 Diabetes, for which recruitment has begun. Investigators have also convened meetings to plan clinical studies on type 1 diabetes as part of the Diabetes TrialNet. The TrialNet will include clinical centers, recruitment networks, and a coordinating center. It will provide the research infrastructure needed to foster the future design and execution of pilot studies and expanded clinical research. The TrialNet will permit more rapid clinical testing of novel approaches to treatment and prevention.

The NIH plans to investigate ways in which interventions that have already been demonstrated to be beneficial by laboratory or clinical investigations can be extended or adapted to larger populations to improve health care delivery and diabetes self-management and to promote healthy lifestyles to reduce the risk of diabetes and obesity. The NIH will also support studies on an important group of proteins called orphan receptors. To advance research on diabetes and related areas of endocrinology and metabolism, the NIH will strive to expand diabetes research centers to bring together clinical and basic science investigators from relevant disciplines.

Minority Health and Health Disparities. Efforts to address disparities in health among minorities and other disadvantaged populations compared to the majority, remain a top priority of the NIH. There are complex factors that underlie disparities in health status – factors that converge and cause differences in disease progression and in health outcomes. While the diversity of the American population is one of the Nation's greatest assets, one of its greatest challenges is reducing the profound disparity in health status of America's racial and ethnic minorities and rural populations, including Appalachian residents, and other similar groups, compared to the population as a whole.

Infrastructure support is an essential part of the framework for the conduct of high quality research and a means of facilitating the participation of minority institutions in such research. The Center of Excellence Endowment Program, Institutional Development Award (IdeA) Program, Biomedical Research Infrastructure Network (BRIN) and the Resource Centers for Minority Aging Research are a examples of research infrastructure support for minority health and health disparities fostered by the NIH.

Plans are also underway to develop Partnership Programs of Excellence in Minority Cardiovascular Health Research. Important aspects of the programs will include community involvement in the research, outreach strategies for patient recruitment and retention, and development of new investigators interested in reducing cardiovascular health disparities. The NIH will also continue research-based health education activities on diabetic retinopathy in the Mexican-American population who are known to have a high rate of diabetes along with more severe hyperglycemia, which indicates poor glucose control.

Other efforts include research on drug abuse and addiction, including efforts to reduce the impact of HIV/AIDS and other disease consequences of drug abuse in minority populations; identifying underlying mechanisms of gender and ethnic differences in the etiology of alcoholism and alcohol-related tissue damage, which is a prerequisite for developing effective treatments for alcoholism and alcohol-induced organ damage in women and ethnic minorities; research to prevent or reduce oral health disparities; an expanded program of Specialized Neuroscience Research Programs; projects involving African Americans affected with diabetes and hereditary prostate cancer; and research on HIV treatment and prevention research, hepatitis C virus, asthma, and autoimmunity – conditions that disproportionately affect minority communities. The NIH and its national, State, and local partners will be working to better understand and address the high cervical cancer mortality rate that exists in much of rural America.

Parkinson's Disease. Genetics, cell biology, and pharmacology are all contributing to new advances in Parkinson's disease upon which the NIH is building its growing effort to understand, prevent and treat this devastating disease. Several genes and their expressed proteins associated with Parkinson's disease have been identified, and efforts are now focused on understanding their role in the disease process.

Nerve cells that produce the neurotransmitter dopamine die in Parkinson's disease. Current treatment is based on replenishing the dwindling supplies of dopamine in the brain. However, this treatment does not slow the underlying death of nerve cells and ultimately fails as the disease progresses. To address this underlying problem, efforts are now underway to expand the work at more than 40 clinical centers to test neuroprotectants – drugs that actually slow or stop the progression of the disease.

Many of these efforts and the ones planned for FY 2003 emerged at a January 2000 workshop, at which intramural, extramural, and industry scientists, representatives from several Parkinson's

disease advocacy groups, and ethicists held intensive discussions which formed the basis of the "NIH Parkinson's Disease Research Agenda." The Agenda encompasses research from basic studies to understand the normal brain functions disrupted by this disease through clinical studies of therapeutic strategies, including drugs, cell replacement, gene manipulations, and surgery

NIH is aggressively undertaking various activities to carry out this Research Agenda. Grant solicitations include: the role of the environment in Parkinson's disease and career development awards in the role of the environment in Parkinson's disease; consortium on deep brain stimulation for the treatment of Parkinson's disease; function of synaptic proteins in synaptic loss and neurodegeneration; role of parkin and related proteins in Parkinson's disease; mitochondrial function in neurodegeneration; and mechanisms of action of deep brain stimulation, among others.

Mechanism Discussion

NIH is committed to increasing a healthy number of new awards, especially for new and young investigators. The FY 2003 President's budget request allows NIH to build on the scientific momentum of investigator-initiated research and provide such new research opportunities. NIH would fund a total of 9,854 competing Research Project Grants (RPGs) in FY 2003, for $3,641 million. This represents an increase of 477 competing RPGs over the FY 2002 estimate of 9,377 awards. In FY 2003, total RPGs funded will be 38,038 awards, an increase of 1,408 awards over the FY 2002 Estimate of 36,633 awards, the highest annual total ever awarded.

The Fiscal Year 2003 President's budget request provides average cost increases for competing RPGs equal to the NIH Biomedical Research and Development Price Index (BRDPI), estimated at 4.0 percent. The apparent increase of 7.2 percent in average costs for total competing RPGs from FY 2002 to FY 2003 results from the cycling of unusually expensive noncompeting grants for AIDS research in FY 2002 into competing status in FY 2003 supported by the National Institute of Allergy and Infectious Diseases (NIAID), as well as the funding of expensive bioterrorism-related challenge grants in FY 2003. Noncompeting RPGs will be funded at committed levels which include increases for recurring direct costs of 3 percent on average.

The FY 2003 President's budget request will support 17,014 full-time training positions (FTTPs), an increase of 305 FTTPs over the FY 2002 Estimate. Funding will provide an increase of 4 percent for pre-doctoral and post-doctoral stipends for NRSA trainees. This will permit NIH to recruit and retain the best and brightest in medical research careers.

Intramural Research increases by 15 percent over the FY 2002 estimate, with most ICs increasing by 9 percent. The NIAID and NC increase by 52 percent and 11 percent respectively, as a result of the large increases in bioterrorism and cancer research.

The Research Management and Support (RMS) activity is vital if NIH is to manage its program resources efficiently and effectively. The RMS activity is used by the NIH to sustain, guide and monitor extramural and intramural research activities of the Institutes. Administrative staff and IT resources are also utilized to ensure proper stewardship of public resources. This activity increases by 17 percent in total in FY 2003. All Institutes and Centers except the National Cancer Institute (NCI) and the NIAID increase by 9 percent over the FY 2002 estimate. The NCI, and in particular, the NIAID are requesting increased resources in the RMS budget activity to effectively manage their large program increases.

The FY 2003 President's budget request provides $240 million for extramural construction awards. Of this amount, $150 million will be targeted towards expanding the ability of researchers to access high-containment research facilities (with laboratories of biosafety 3 and 4) by providing construction grants for the renovation or construction of these facilities. In FY 2003, the National Center for Minority Health and Health Disparities will also support construction grant awards. Finally, $77 million is requested for extramural construction in the National Center for Research Resources.

In the FY 2003 President's budget, Buildings and Facilities (B&F) would be funded at $633 million. This increase will allow the NIH to fulfill its commitment to integrating neuroscience research in the John Edward Porter Neuroscience Research Center (NRC), maintain responsible funding support for the ongoing essential safety, renovation and repair, and related projects that are vital to proper stewardship of the entire portfolio of real property assets, continue with the integration of the new CRC into old Building 10, increase the physical security of NIH facilities, and to construct high containment facilities on the Bethesda Campus and at Ft. Detrick to support bioterrorism research.

A major portion of the physical improvements will help to manage and control access to the NIH campus and to campus buildings. Complementing a perimeter fence which is provided through FY 2002 funding, this request includes: a visitor center for welcoming and screening visitors and issuing visitor passes that will also operate as the center for campus-wide transportation services; the construction of the infrastructure to manage and screen deliveries of scientific and other equipment to NIH facilities in the DC metro region; completion of a campus loop road necessary for effective emergency response and proper internal circulation of a large volume of commercial and employee vehicles; security enhancements to specific buildings; and improvements to the information technology infrastructure. Smaller scale, similar projects for the Rocky Mountain Laboratory are also included in this request.

While NIH's facilities construction dollars are requested in NIH, the budget proposes to transfer these funds, along with those for other HHS construction projects, to the Health Facilities Construction and Management Fund in the Office of the Secretary for oversight by the Office of the Assistant Secretary for Administration and Management. This reflects HHS's commitment to improve HHS-wide capital planning.

The Extramural Clinical Research and the Pediatric Research Loan Repayment Programs are trans-NIH programs supported by nearly all the ICs. The FY 2003 President's budget request doubles this program by providing $28 million over the FY 2002 estimate. These programs will help to increase the number of outstanding investigators in Clinical and Pediatric Research in the future, with a goal of supporting pediatric researchers with 15-20 percent of these awards.

In the FY 2003 President's budget request, a total of $49 million is directed towards collaborative research projects with the Department of Defense, including development of an HIV/AIDS vaccine, research into the use of free electron lasers for surgical debridement, and research into radiation treatment research.

NATIONAL INSTITUTES OF HEALTH
FY 2003 President's Budget Request
(dollars in thousands)

Appropriation	FY 2001 Budget Authority 1/	FY 2002 Current Estimate 2/	FY 2003 Estimate
NCI	$3,740,127	$4,209,721	$4,724,505
NHLBI	2,292,879	2,581,560	2,798,178
NIDCR	306,605	345,303	374,319
NIDDK	1,403,894	1,470,815	1,609,292
NINDS	1,175,704	1,331,648	1,443,392
NIAID	2,069,388	2,542,446	3,999,379
NIGMS	1,532,180	1,726,467	1,881,378
NICHD	981,980	1,117,242	1,218,112
NEI	509,389	582,863	631,818
NIEHS	507,979	571,479	619,769
NIA	788,767	896,064	971,709
NIAMS	396,392	450,240	488,228
NIDCD	302,093	343,071	371,951
NIMH	1,108,213	1,253,650	1,359,008
NIDA	791,972	890,938	967,898
NIAAA	342,277	385,946	418,487
NINR	105,456	120,751	130,809
NHGRI	382,400	430,718	466,695
NIBIB	68,878	112,022	121,378
NCRR	812,169	1,012,538	1,091,374
NCCAM	89,478	104,980	113,823
NCMHD	132,153	157,865	187,159
FIC	50,877	57,353	63,833
NLM	242,398	281,752	315,163
OD	191,543	238,824	258,544
Subtotal	20,325,191	23,216,256	26,626,201
B&F	160,876	326,100	632,800
Subtotal NIH Programs	20,486,067	23,542,356	27,259,001
VA/HUD Approp.	62,861	80,728	76,074
Total, Prog. Level	20,548,928	23,623,084	27,335,075

1/ FY 2001 reflects all transfers and rescissions
2/ Reflects supplemental appropriations from the Emergency Relief Fund (ERF) and transfer of $100M to the Global Fund for HIV/AIDS, Malaria and Tuberculosis.

National Institutes of Health
FY 2003 President's Budget Request
(dollars in thousands)

MECHANISM	FY 2001 Actual		FY 2002 Current Estimate		FY 2003 Estimate	
Research Grants:	No.	Amount	No.	Amount	No.	Amount
Noncompeting	23360	$7,909,663	25309	$9,138,002	26066	$9,952,512
Administrative supplements	(1,956)	204,423	(1,772)	139,681	(1,813)	154,847
Competing:						
Renewal	2806	1,079,913	2837	1,150,192	2960	1,264,524
New	6293	1,946,348	6438	2,055,018	6810	2,356,805
Supplements	87	18,189	102	28,174	84	19,711
Subtotal, competing	9186	3,044,450	9377	3,233,384	9854	3,641,040
Subtotal, RPGs	32546	11,158,536	34686	12,511,067	35920	13,748,399
SBIR/STTR	1740	417,879	1947	481,482	2118	555,663
Subtotal, RPGs	34286	11,576,415	36633	12,992,549	38038	14,304,062
Research Centers:						
Specialized/comprehensive	834	1,373,174	902	1,585,807	953	1,878,893
Clinical research	95	230,268	94	260,220	100	279,225
Biotechnology	72	109,298	76	125,608	78	136,881
Comparative medicine	48	101,981	54	103,330	62	114,658
Res. Ctrs. in Minority Institutions	18	44,668	18	52,388	18	56,700
Subtotal, Centers	1067	1,859,389	1144	2,127,353	1211	2,466,357
Other Research:						
Research careers	3234	394,581	3632	452,868	3939	510,793
Cancer education	91	21,740	89	22,400	93	25,206
Cooperative clinical research	408	323,689	458	362,788	494	420,579
Biomedical research support	157	66,962	179	90,055	197	116,055
Minority biomedical research support	158	100,072	172	113,478	184	124,107
Other	1089	313,475	1278	345,787	1404	395,544
Subtotal, Other Research	5137	1,220,519	5808	1,387,376	6311	1,592,284
Total Research Grants	40490	14,656,323	43585	16,507,278	45560	18,362,703
Training:	FTTPs		FTTPs		FTTPs	
Individual awards	2724	95,357	2866	109,053	2910	114,559
Institutional awards	13762	494,347	13843	545,437	14104	574,267
Total, Training	16486	589,704	16709	654,490	17014	688,826
Research & development contracts	1314	1,371,179	1567	1,780,290	1820	2,575,285
(SBIR/STTR)	(77)	(17,408)	(80)	(18,174)	(87)	(20,367)
Intramural research		2,014,546		2,295,697		2,643,528
Research management and support		719,926		828,774		971,499
Cancer prevention & control		461,572		514,151		570,473
Construction		78,000		115,000		240,180
Library of Medicine		242,398		281,752		315,163
Office of the Director		191,543		238,824		258,544
Buildings and Facilities		160,876		326,100		632,800
Total Budget Authority		**20,486,067**		**23,542,356**		**27,259,001**
VA/HUD Appropriation		62,861		80,728		76,074
Budget Authority with VA/HUD Approp.		**20,548,928**		**23,623,084**		**27,335,075**
Type 1 Diabetes		0		97,000		97,000
Program Total, NIH		20,548,928		23,720,084		27,432,075
(Clinical Trials)		(2,145,667)		(2,412,037)		(2,805,761)

FY 2003 President's Budget Request
$27,259 Million